



Service Information

Built-in Oven

AKZM 657/IX

8525 657 53002

Last Modification: 03/04/14

Creation Date: 05/06/12

Spare Part List	2
Exploded View	4
Technical Data	5
Dimensional Sketch	6
Wiring Diagram	7
Error Codes	9
Configuration Description	10
Testprogram	12
Configuration code	13
Service Bulletin 4812 715 40401	14
Service Bulletin 4812 715 40418	16

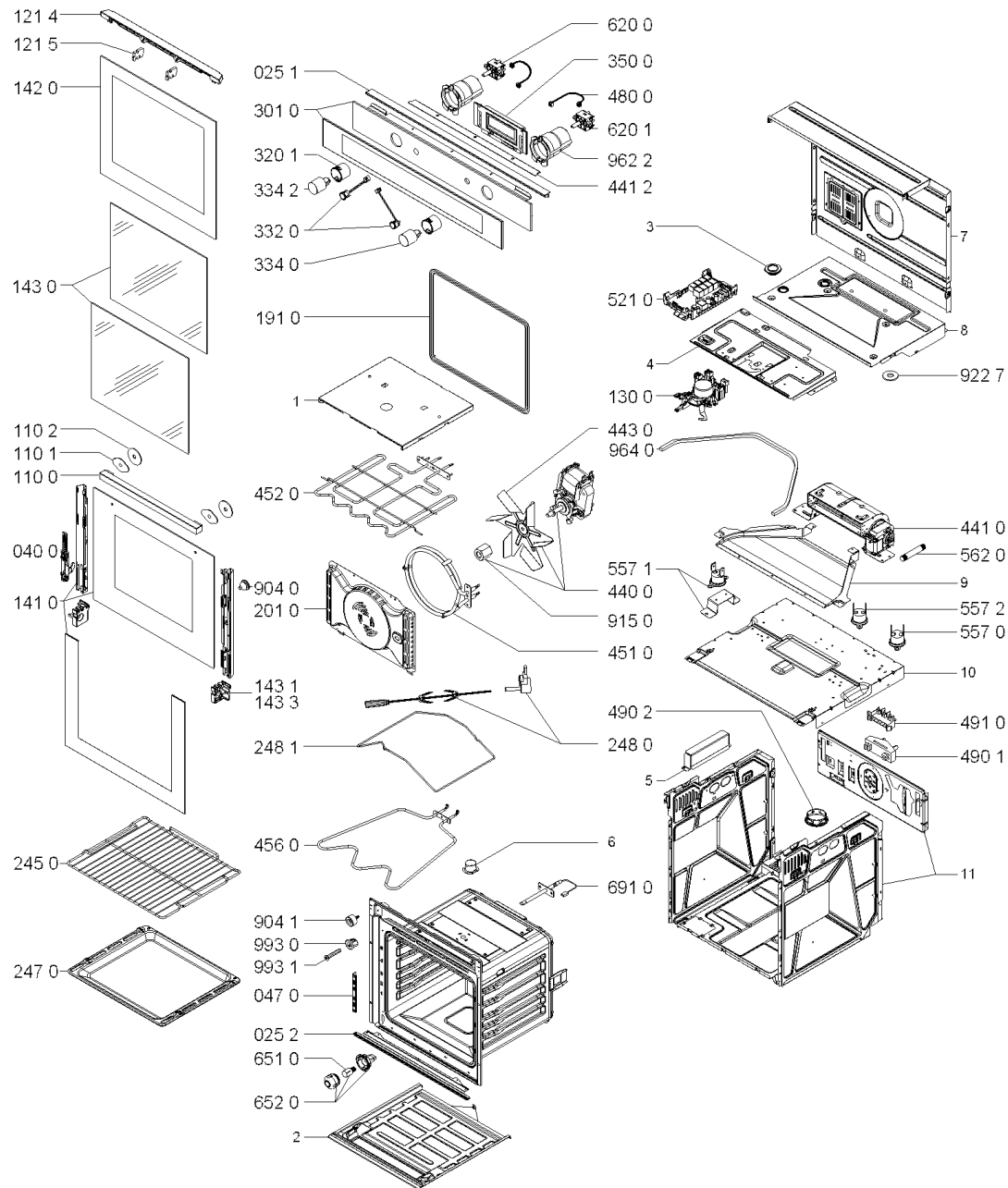
This document is only intended for qualified technicians who are aware of the respective safety regulations.
Subject to modifications

Spare Part List

Pos	12NC	Description
0251	4801 201 00539	Profile ventilator
0252	4801 211 01163	Trim lower
0400	4801 211 01596	Hinge oven door
0470	4801 211 01154	Hinge running mechanism
1100	4801 211 01578	Door handle
1101	4812 466 68928	Buffer piece door handle
1102	4812 462 48451	Washer door handle
1214	4801 211 01593	Exhaust fume
1215	4801 211 01615	Spacer
1300	4810 105 55032	Door lock assembly
1410	4801 211 01592	Oven door assembly
1420	4801 211 01609	Oven door inner glass
1430	4801 211 01611	Door glass
1431	4801 211 01613	Support oven glass
1433	4801 211 02664	Support oven glass
1910	4801 211 01583	Gasket door
2010	4801 211 01601	Rear panel enamelled
2450	4801 211 01183	Oven shelf
2470	4801 211 03007	Fat pan enamelled
2480	4801 310 00139	Kit motor turnspit + rotary spit
2481	4801 211 01582	Turnspit support
3010	4801 211 01188	Glass panel + frame
3201	4801 211 02715	Ring push-push
3320	4801 211 01169	Push button
3340	4801 211 01153	Knob push-push
3342	4801 211 01603	Knob
3500	4810 103 64134	Display G2 EVO analogue
4400	4812 361 18492	Motor fan
4410	4801 211 01584	Air cooling fan
4412	4801 211 01151	Gasket water leakage
4430	4819 515 48065	Fan 6-blades
4510	4801 211 01186	Heating element circular 2000W
4520	4840 000 00514	Heating element upper/grill 2450W
4560	4801 211 01147	Heating element lower 1150W
4800	4801 211 01172	Cable harness selector switch-display
4901	4801 211 04772	Cable clamp
4902	4801 211 00013	Cap feed through
4910	4812 290 68329	Connection block
5210	4810 104 89663	Power unit Ester
5570	4801 211 01598	Thermostat 70 °C
5571	4810 104 90094	Thermostat 165 °C
5572	4812 282 28346	Thermostat 115 °C
5620	4810 104 89052	Fuse 315mA (Service)
6200	4801 211 01145	Oven switch 11 position
6201	4801 211 01146	Selector switch +/- incremental
6510	4810 103 91431	Lamp halogen 40W 230V
6520	4801 211 01148	Lamp halogen 40W cpl (bulb 481010391431) Till: 10/14
6520	4810 106 38530	Halogen lamp complete assembly 40W From: 11/14
6910	4801 211 01597	Temperature sensor
9040	4801 211 01594	Spacer glass door

Pos	12NC	Description
9041	4801 211 04065	Damper oven door
9150	4819 505 18145	Nut fan motor
9227	4819 532 28281	Washer
9622	4801 211 01167	Support push-push
9640	4801 211 02934	Gasket
9930	4801 211 01185	Spacer oven
9931	4801 211 04721	Kit

Exploded View



4000 105 01638

Technical Data

Electrical base data

Rated voltage 230-240 V~
Main connection 230-240 V 1N~50 Hz

Power Consumption

Total connected load 2700 W
Upper heating element/Grill 2450 W
Forced air 2000 W
Lower heating element 1150 W

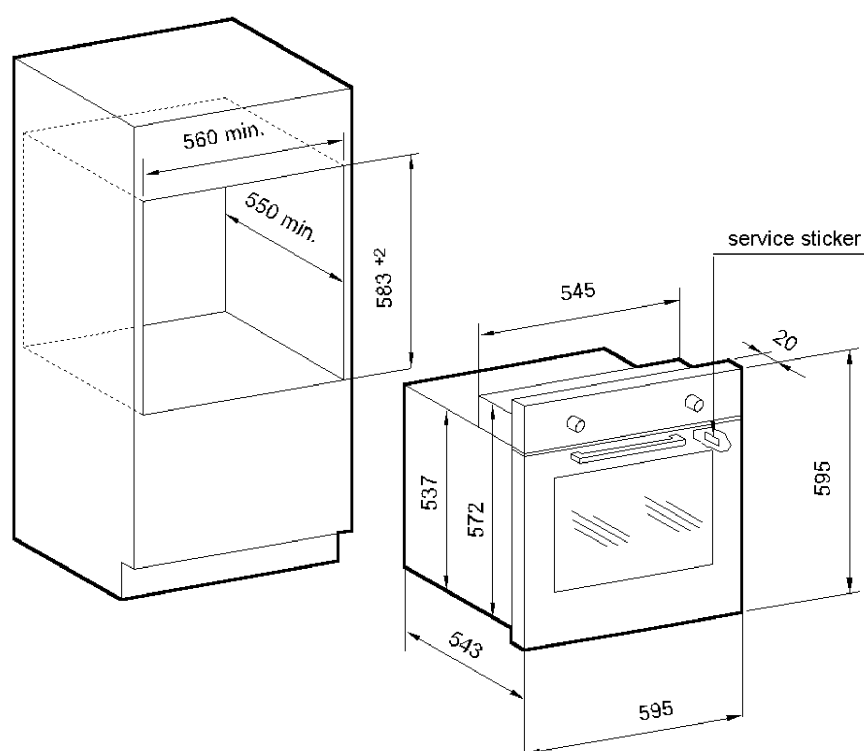
Electrical components

Auto timer G2 EVO

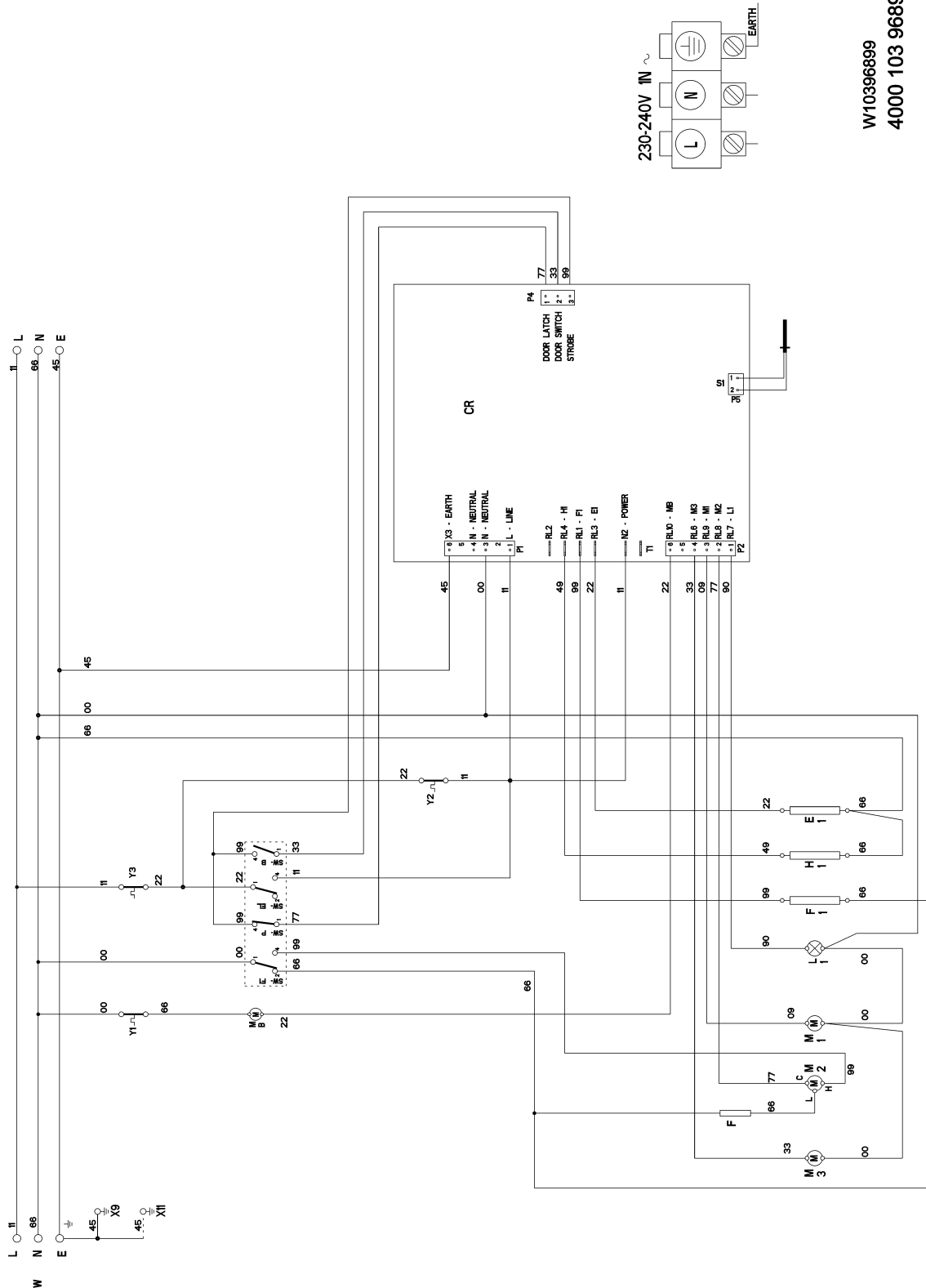
Accessories

Fat pan enameled 452.5 x 375 mm
Grid chrome 452.5 x 369.2 mm

Dimensional Sketch

**Z8100177**

Wiring Diagram



W10396899
4000 103 96899

Legend

CR	ELECTRONIC OVEN CONTROL UNIT
E1	UPPER HEATING ELEMENT
F1	CIRCULAR HEATING ELEMENT
H1	LOWER HEATING ELEMENT
L1	OVEN LAMP
M1	CAVITY FAN
M2	DUAL SPEED COOLING FAN
M3	TURNSPIT MOTOR
MB	DOOR LOCK MOTOR
F	FUSE
S	ELECTRONIC SENSOR
SW/B	DOOR LOCK SWITCH
SW/P	DOOR SWITCH
SW/EL	POWER SUPPLY ELEMENT SWITCH
SW/F1	AUXILIARY SWITCH
Y1	THERMOLIMITER
Y2	THERMOLIMITER
Y3	THERMOLIMITER
W	MAIN TERMINAL BLOCK
X1	EARTH CABINET
X9	EARTH UPPER HEATING ELEMENT

00	BLACK
11	BROWN
22	RED
33	ORANGE
44	YELLOW
55	GREEN
66	BLUE
77	VIOLET
99	WHITE
09	WHITE-BLACK
29	WHITE-RED
49	WHITE-YELLOW
69	WHITE-BLUE
90	GREY
92	PINK
45	YELLOW-GREEN

103 96899en

Error Codes

Failure Code	Failure Type	Suggested Repair Action
F01	Probe	Temperature Probe error. First check probe connection, if ok disconnect the probe and measure its resistance ($1000\Omega + 3.75 \times \text{Temp ambient}$). If value is in range change AM.
F02	Temperature	Temperature error. Check heating elements insulation (disconnect the heating element and check each terminal for continuity to GROUND). If there is no continuity change AM. If there is continuity change heating element.
F03	EEPROM	EEPROM error. Check with the manual configuration menu that the oven is correctly configured and the test bit is set to ON. Wait 10 minutes. If F03 appears again, change AM.
F04	WIDE	WIDE communication error. First check the connection on P007 of AM. If it is OK check the connection of the WIRE that start from AM P007 to the UI board. If it is ok connect a new UI and check if the appliance works properly. If not change the AM.
F05	Latch (Pyro version only)	Latch error. First unplug the appliance, wait at least 10sec then reconnect. Verify that latch system repositioning works correctly (door has to be closed, motor has to run). If this happens, check the connection between AM and door latch system. If it is ok check micro switch functionality (door switch open if the door is open and latch switch open if the door is unlocked). If switches are ok then change AM.
F06	Door (Pyro version only)	Door error. First check connection between AM and door latch system. If it is ok check door switch functionality (open circuit if the door is open, closed circuit if the door is closed). If switch is ok then change AM.
F07	Cooking parameter data set error	Data set error. If the problem persists change AM.
F08	UI EEPROM error	User Interface EEPROM error. Change UI (Navigator or Atlas).
F09	UI SPI memory error	UI SPI memory error. Change UI (Navigator or Atlas).
F10	Function knob error	The value read is not allowed for the selected knob. First check connection between UI (dummy or smart) and the knob. If it is ok, check that the oven is correctly configured using the manual configuration menu. If the problem persists change the knob encoder. If the problem still persists change the AM.
F11	6 TH sense error	6 TH sense error, Voltage error or Current error. Verify power supply voltage is $230 \pm 10\%$. If supply is within tolerances, change AM.
F18	Zero crossing error	Not foreseen.
F20	FPGA error (only ATLAS)	Change UI.
F21	HMI input error (only ATLAS)	Change UI.

81003105en

Configuration Description

Manual Configuration Procedure

- ✓ To be done at appliance manager (AM) / user interface (UI) exchange
- ✓ To access the manual configuration menu, the function knob have to be positioned to the 0 (off) position
- ✓ Configuration numbers are on the rating plate – XX/XX : respectively the UI/AM numbers, if UI is 00, you do not need to configure the User Interface.
- ✓ The configuration menu can be accessed only within the first minute after the oven is plugged in.

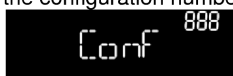
At the end of the procedure don't forget to set the TEST BIT to ON, if it's not done, the oven will show the F03 error message after a few minutes.

G2Evo User Interface (with one or two buttons)

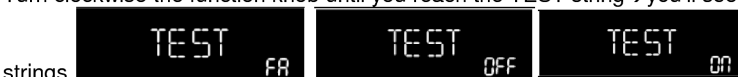


Within the first minute after plug in:

- 1) Press the OK button for 5 seconds → a long “beep” is played;
- 2) Press the OK button 4 times (must be pressed in 5 seconds) → display shows “CONF” and the configuration number



- 3) Press the OK button for 3 seconds to enter the edit mode → configuration code blinks
- 4) Turn the temp. knob to select the configuration code → confirm it by pressing OK for 3 seconds
- 5) Turn clockwise the function knob until you reach the TEST string → you'll see one of these



strings

- 6) Press OK for 3 seconds → TEST BIT status blinks
- 7) Turn the temp. knob to set the TEST BIT to ON → press OK for 3 seconds
- 8) Finished, to exit the configuration menu, turn the function knob clockwise to 0 (off)

81003106en

Navigator and Atlas User Interface



Within the first minute after plug in:

- 1) Press the OK and << buttons for 5 seconds → a long “beep” is played;
- 2) Press the OK button 4 times (must be pressed in 5 seconds) → display shows “CONF”



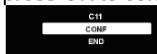
- 3) To enter the configuration menu, press the OK → UI:xx is shown



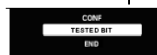
- 4) Turn the temperature knob (up/down arrow buttons if touch) to select the UI configuration and press OK to confirm → AM:xx is shown



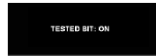
- 5) Turn the temperature knob (up/down arrow buttons if touch) to select the AM configuration and press OK to confirm → CONF menu is shown again



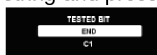
- 6) Turn the temperature knob (up/down arrow buttons if touch) and go to the TESTED BIT



- 7) Press OK to enter edit mode



- 8) Turn the temperature knob (up/down arrow buttons if touch) to select the “TESTED BIT: ON” string and press the << (back) button to confirm → menu is shown again



- 9) Turn the temperature knob (up/down arrow buttons if touch) and go to END string, press OK to exit the manual configuration menu

81003106en

Testprogram

DEMO MODE for MINERVA ELECTRONIC OVENS

G2EVO Display



Functionality: In this state the user interface shows a sequence of screen that represent the oven features. All the electric loads (heaters) are switched OFF. The only loads that are managed like as during the normal behavior of the oven are the lamp, and the cooling fan.

Procedure: the procedure to enter in Demo mode is:

With the function knob on 0 (off)

Within the first minute from oven plug in:

1. OPEN the door
2. Keeping the DOOR OPEN, press BACK button for 5 seconds

At this point the display starts the screen sequence described here below.

In Demo mode the user interface inputs have no impact on the oven; the UI shows the screen related to the position like in normal functions with the difference that the loads are not switched ON. Only the lamp is switched ON if the position if the function knob required it ON or if the door is open.

After 2 minutes of no interaction between the customer and the OVEN the screen sequence starts again and the LAMP is switched OFF.

NOTE: DEMO mode must be set within 1 minute after the power ON. It is not possible set the DEMO mode after 1 minute from the power ON.

Power OFF will not delete the Demo mode. Once the DEMO mode is activated it will be maintained at the next power ON. In order to deactivate the DEMO mode the same procedure to enter has to be executed.

On the oven versions with only one button, to exit the DEMO MODE, you need to enter into the MANUAL CONFIGURATION menu, exiting the MANUAL CONFIGURATION menu, also the DEMO MODE will be cancelled.

Navigator / Atlas (Flagship) Display



Functionality: In this state the user interface shows a sequence of screen that represent the oven features. As an alternative the buttons can be operated as normal, but all the electric loads (heaters) are switched OFF. The only loads that are managed like as during the normal behavior of the oven are the lamps, and the cooling fan.

Procedure: the procedure to enter in Demo mode is:

With the function knob on 0 (off)

Within the first minute from oven plug in:

1. OPEN the door
 2. Keeping the DOOR OPEN, press BACK button for 5 seconds
- Activation/deactivation is confirmed by a sound.

On power up, when demo mode is activated, system directly jumps to stand by screen by taking 12:00 as default TOD.

After two minutes of inactivity system automatically jumps to demo mode slideshow.

NOTE: DEMO mode must be set within 1 minute after the power ON. It is not possible set the DEMO mode after 1 minute from the power ON.

Power OFF will not delete the Demo mode. Once the DEMO mode is activated it will be maintained at the next power ON. In order to deactivate the DEMO mode the same procedure to enter has to be executed.

81003107en

Configuration code

..... GE00-AN15

Service Bulletin 4812 715 40401

AUTHOR: Juergen Reinhardt

Last Update: 25/03/13

VERSION: 1.0

TITLE: Improved oven shelf grid design

SUBJECT: Stability issues with oven shelf grid

REMEDIAL ACTION

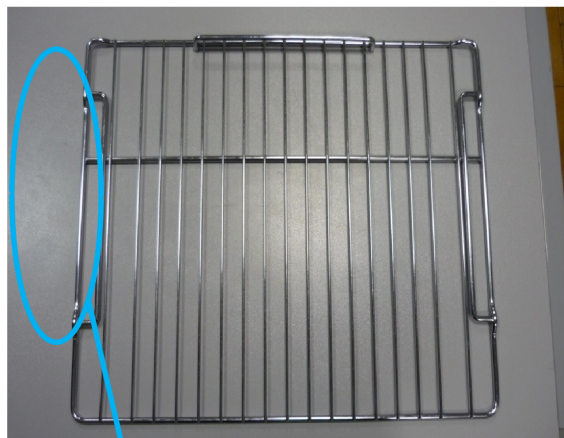
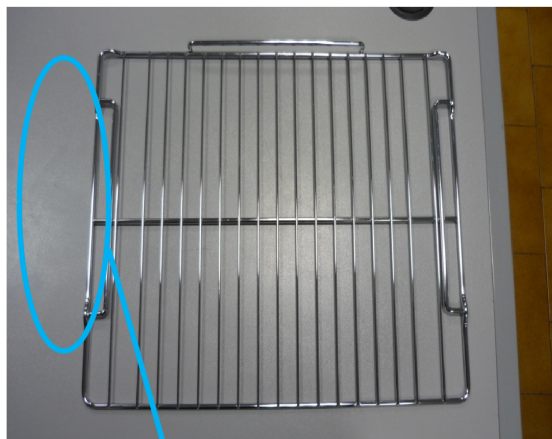
The mechanical design of the oven shelf grid has been modified for solving the stability issue.
The oven shelf grid 4801 211 01183 has been substituted by 4810 105 18218.

Technical Failure Code



654 2440 Cx A

Oven grid stability

Old code: **4801 211 01183**New code: **4810 105 18218**

Wire has been moved toward the back in order to have more stability when grid is inserted on lateral grids and sliding shelves

F2S Number

F2S000551

Service Bulletin 4812 715 40418

AUTHOR: Juergen Reinhardt

Last Update: 12/06/14

VERSION: 1.0

TITLE: Lower heating element has been changed

SUBJECT: Deletion of lower heating shield in production requires new lower heating element.

REMEDIAL ACTION

From 21.January 2013 onward the bottom heater protection has been deleted. With the introduction of this modification a new bottom heating element must be used for the repair. The method of fixation and dismantling have been not affected by the change. All models using the code 4801 211 01147 and 4801 211 04145 are involved.

For the models below the change is effective from 26.August 2013 onward:

852587901100
852587901101
852589001100
852589001101
852589101100
855648822000
855648822001
855649122000
855649122001

For models with 1150W / 230V using 4801 211 01147 heater order the new bottom heater → 4810 105 51720

For all models with 1150W / 400V using 4801 211 04145 heater order the new bottom heater → 4810 105 51732

Technical Failure Code



Kxx 4560 Cx A

F2S Number